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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,882	08/24/2001	Joachim Sacher	Sacher II-Div	1028

7590

03/31/2003

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EXAMINER

MOORE, KARLA A

ART UNIT

PAPER NUMBER

1763

DATE MAILED: 03/31/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/902,882

Applicant(s)

SACHER, JOACHIM

Examiner

Karla Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 20 recites the limitation "said shutter support structure". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. Claims 14-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,037,006 to Chakrabarti et al. in view of U.S. Patent No. 5,221,636 to Landreau et al.
7. Chakrabarti et al. Disclose an apparatus for coating at least one of the front and rear facets of semiconductor laser diodes (lasers) with an anti-reflection layer, substantially as claimed. The apparatus

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comprises: a receiver (Figure 10, 160) for containing lasers; a coating source (170) disposed in said receiver; and a support structure (164) for supporting said lasers to be coated such that said lasers are supported with their facets all at essentially the same distance from said coating source.

8. Further, in the apparatus of Chakrabarti et al. said lasers are supported on a support structure forming a magazine (150) by which they can be moved into and out of said receiver (column 5, rows 59-62 and column 6, rows 60-63). Additionally, said lasers are arranged in a circle around said coating source in Figure 8, although the source is not at the center of the circle.

9. However, Chakrabarti et al. fail to teach in-situ monitoring of at least one of the laser parameters including the laser light emitted, electric voltage, quantum efficiency or threshold current. Nor, does Chakrabarti teach for each laser a shutter supported in said receiver so as to be movable selectively in from to lasers to protect them from further coating or a control unit including at least one of a laser control, shutter control, a layer thickness control and a vacuum control arrangement and said control unit communicating with said coating source, said laser support and said shutter support structure by at least one of electrical and optical conduits.

10. Landreau et al. teach the use of a voltmeter (column 3, rows 34-37) for in-situ monitoring of the electrical voltage of the laser for the purpose of detecting a maximum voltage, which indicates an overall reflectivity minimum of a coating applied and thus provided a stopping point for the coating process (column 2, rows 14-27).

11. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided in-situ monitoring of at least one of the laser parameters, such as electric voltage in Chakrabarti et al. in order to determine an overall reflectivity minimum of a coating applied and thus a stopping point for the coating process as taught by Landreau et al.

12. Additionally, Landreau et al. teach the use of a retractable shutter (23) for the protection of a laser while a laser support is pivoted (column 3, rows 60-62).

13. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a shutter in Chakrabarti et al. in order to protect a laser from coating when needed as taught by Landreau et al.

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14. Landreau et al. also teach the use of a control unit (32) which monitors a laser parameter (i.e. electric voltage) of at least one of the lasers in said receiver for coating their facets while at least one laser is electrically operated. Said control unit includes a shutter control and a thickness control (column 3, rows 46-62). Said control unit is in communication with the coating source (S1), said laser support (S3) and a shutter support structure (S4) (Figure 1; column 3, rows 28-31). The control unit is provided for the purpose of detecting the instant where said voltage passes through a maximum and controlling the stooping of coating means (column 3, rows 43-45).

15. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a control unit in Chakrabarti et al. in order to detect the instant where said voltage passes through a maximum and to control the stopping of the coating means as taught by Landreau et al.

16. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chakrabarti et al. and Landreau et al. as applied to claims 14-16 and 18-20 above, and further in view of U.S. Patent No. 5,980,975 to Nomura et al.

17. Chakrabarti et al. and Landreau et al. disclose the apparatus substantially as claimed and as described above.

18. However, the prior art fails to teach arrangement of said lasers along lines disposed at opposite sides equidistantly from a coating source.

19. Nomura et al. teach placement of substrates (Figure 8, 10) disposed on opposite sides equidistantly from a coating source (9, column 11, rows 39-40) for the purpose of exposing them simultaneously to film formation (column 12, rows 35-45).

20. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided the substrates on opposite sides and equidistant from a coating source in the prior art in order to simultaneously form a film on the substrates as taught by Nomura et al.

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Response to Arguments

21. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., individual shutters for each of the lasers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner recognizes that Applicant has attempted to amend claim 14 to further describe this feature. However, Examiner believes that the amended wording is still broad enough to read on a single shutter, which is movable selectively in front of each of the lasers to protect them from coating.

22. Examiner notes that while the electron beam source is not centered relative to the rotation structure (a feature which is not recited in the present claims), the lasers are however all essentially at the same vertical distance from the coating source.

23. Examiner also notes that the 103 rejection of claims 14-16 and 18-20 is based on 6,037,006 and 5,221,636, not 5,980,975. Applicant's remarks are drawn to 5,980,975. Where applicable, the remarks have been addressed with reference to the actual prior art cited against the present invention.

24. Examiner further notes that the 6,037,006 patent has an effective filing date of 04/18/97 (as disclosed on the face of the patent) and is therefore prior art that can be used against the present invention.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

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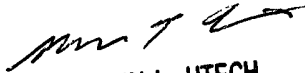
shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 703.305.3142. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on 703.308.1633. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9310 for regular communications and 703.872.9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

km
March 21, 2003


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